Embedded Systems Design Series

Digital Logic Trainers

DL-010 Combinational Logic Trainer



Features:

- 72-page professionally written lab manual authored by university professor, Enoch Hwang, PhD.
- 11 hands-on labs correlated to an introductory digital logic course.
- Sturdy blow molded carrying case making the entire lab lightweight and portable.
- Attractive and easy to use system draws students in to the beauty of digital logic and embedded systems design.
- Complete kit with 9V wall adapter and 100 machined pin hookup wires. No need to buy anything else.
- All gate elements are pre-mounted and fully integrated.
- Expandable breadboard allows the system to grow as students' knowledge increases.
- Perform experiments using standard TTL logic.
- Well regulated 5V power (Vcc) and ground (GND) points.
- Each gate element is presented in its easy to visualize graphic form.

Global Specialties' DL-010 is first in its series of embedded systems design trainers. The DL-010 teaches students the basics of combinational digital logic design, which is the foundation of microprocessor and microcontroller designs.

With the DL-010, all necessary logic components are included and pre-mounted for fast, easy implementation of combinational logic circuits, which are used as the building blocks of microprocessors. These circuits include multiplexers, decoders, encoders, full adders, adders/subtractors, comparators, and ALU's.

Global Specialties' logic trainer simplifies the teaching process by eliminating the need to discretely wire IC's as all gate elements are premounted, de-coupled and de-bounced, ready for immediate classroom use. Students can spend their time directly on logic training.

Most importantly, the trainer includes a 72-page professionally written training manual featuring an overview of digital logic and 11 hands-on labs enhancing any textbook currently in use.

The DL-010 is a complete and ruggedly packed trainer that will provide a solid learning platform to individuals and classroom students.

Some of the logic circuits that can be implemented with this trainer include:

2-to-4 decoder with and without enable

3-to-8 decoder with and without enable

2-to-1 multiplexer

4-to-1 multiplexer

8-to-1 multiplexer

Full adder

4-bit adder

4-bit adder/subtractor

4-bit carry-look-ahead

2-bit ALU

8-to-3 Encoder

Comparator

Shifter

4-bit BCD to 7-segment decoder

Any custom combinational circuit as derived from a truth table with up to four inputs

Many custom combinational circuits with more than four inputs

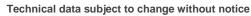


Digital Logic Trainers

Combinational Logic Trainer

Specifications

Model DL-010	
Not gate	12
2-Input AND gate	12
4-Input AND gate	8
2-Input OR gate	8
4-Input OR gate	8
2-Input XOR gate	12
LEDs	8
7-Segment LED display	1
Slide switch	8
Push Button switch	1
270 tie point Bread Board	yes
Vcc & GND tie points	yes
Hook up wire, 100pcs	yes
9V wall adaptor	yes
Regulated 5V supply	yes
DL-010 Manual	yes
Width	13.5 in
Length	8.5 in
Height	3.5 in
Weight	3.40 lbs
Technical data subject to change without notice	





globalspecialties.com



Chapter 1: Combinational Logic Design Trainer

Model DL-010

Chapter 2: Microprocessors

Introduction to Microprocessors Combinational and Sequential Circuit Analogy

Chapter 3: Digital Logic Circuits Basic Logic Gates

Digital Circuits

Identifying Combinational Circuits Analysis of Combinational Circuits

Boolean Algebra

Simplifying Combinational Circuits Synthesis of Combinational Circuits

Chapter 4: Labs

Basic Gates, Lights and Action! NAND, NOR, XOR, AND XNOR Gates **Designing Combinational Circuits**

Multiplexers

Decoders

Comparators Full Adder

4-bit Adder

4-bit Adder/Subtractor

2-bit Arithmetic and Logic Unit (ALU)

BCD to 7-Segment LED Decoder







Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001:
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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